

Erica M. Spitzig
513.357.9310
ESpitzig@taftlaw.com

September 27, 2022

VIA U.S. MAIL AND EMAIL

Catherine Chiccine
U.S. Environmental Protection Agency
Region 7
11202 Renner Blvd.
Lenexa, Kansas 66219
Chiccine.catherine@epa.gov

**Re: Hayford Bridge Road Groundwater Superfund Site
St. Charles, St. Charles County, Missouri**

Dear Ms. Chiccine:

We write on behalf of the City of St. Charles, Missouri (the “**City**” or “**St. Charles**”) to request that United States Environmental Protection Agency (“**EPA**”) take urgent action to address the imminent and substantial endangerment of the health and welfare of the citizens of St. Charles and the environment due to the release and presence of hazardous substances at the Hayford Bridge Road Groundwater Superfund Site in St. Charles, St. Charles County, Missouri (the “**Site**”). To date, EPA has disregarded the City’s concerns related to the Site and ignored the City’s prolonged and repeated requests to take action to protect the City’s drinking water supply and the health and safety of its citizens. Due to increasing levels of hazardous substances at the Site and in the City’s drinking water wells, the City demands that EPA take immediate action to address the imminent and substantial endangerment to the City’s water supply and the health and safety of its citizens.

I. September 12, 2022 Sampling Results Suggest there is an Imminent and Substantial Threat to Public Health

On September 12, 2022, the City’s environmental consultant, 212 Environmental Consulting, LLC (“**212 Environmental**”) conducted sampling of groundwater production wells at the Site and within the Elm Point Wellfield, as well as the influent and effluent at the City’s water treatment plant. A true and accurate copy of the Sampling Report is attached hereto as

Attachment A.¹ The Sampling Report indicates the concentration of vinyl chloride in the City's production well CW-6 is in excess of EPA's maximum contaminant level ("MCL") of 2.0 micrograms per liter ("µg/L") for vinyl chloride in drinking water. *See* Sampling Report, p. 13. The Sampling Report also indicates an increasing concentration of 1,2-dichloroethene and cis-1,2-dichloroethene ("cis-1,2-DCE") in well CW-6. *See* Sampling Report, pp. 13-14. Lastly, vinyl chloride was measured above EPA's Regional Screening Level ("RSL") for tap water in the raw water influent to the City's water treatment plant.

On numerous occasions beginning on at least January 12, 2022, the City has previously notified EPA of increasing levels of contaminants in the Elm Point Wellfield, and its concerns about the threat to the City's water supply. For example, on August 18, 2022, Todd Aselyne of 212 Environmental provided data to EPA via email regarding the levels of constituents of concern ("COCs") in the wellfield. Those sampling results indicated that concentrations of vinyl chloride and cis-1,2-dichloroethene had increased significantly in monitoring well MW-C17 since the previous groundwater sampling event conducted in November 2021. At the time, vinyl chloride was measured above the MCL in groundwater collected from MW-C17. Vinyl chloride and cis-1,2-dichloroethene were also measured in production well CW-8, which is located approximately 275 feet up-gradient from monitoring well MW-C17. At the time, the City requested that EPA require Ameren Missouri ("Ameren") and/or the OU-3 potentially responsible parties ("PRPs") to conduct additional monitoring, including weekly testing of the influent and effluent at the water treatment plant to ensure the continued protection of the City's water supply. Since August, vinyl chloride concentrations have now increased in production well CW-6 and been detected in the influent to the water treatment plant, as demonstrated by the September 12 sampling results.

Indeed, as documented in the attached Figure 1, 212 Environmental's analysis of groundwater sampling data for cis-1,2-DCE at the Site indicates that at least three of the City's production wells (CW-5, CW-6, and CW-8) are within the boundaries of the plume of volatile organic compounds ("VOCs") at the Site.

In light of these alarming results, the City demands that EPA take immediate action to protect the health and safety of its citizens and ensure the safety of its drinking water. Specifically, the City demands that EPA require that Ameren and/or the OU-3 PRPs immediately develop a specific work plan, satisfactory to the City, to guarantee the protection of the City's drinking water and its citizens. This work plan must include but not be limited to the relocation of the City's groundwater production wells currently located in the Elm Point Wellfield.

Additionally, in the interim, the City demands that additional, more frequent monitoring be performed at the Site, including but not limited to the following: (a) conducting quarterly fluid level gauging in all monitoring wells, piezometers, and production wells in OU-3, OU-4, and the

¹ A copy of the Sampling Report was previously forwarded to EPA on September 13, 2022 by Paul Michalski of 212 Environmental via email correspondence.

Elm Point Wellfield; (b) collecting weekly samples for laboratory analysis of the COCs from the influent and effluent at the City's water treatment plant; (c) collecting weekly samples for laboratory analysis of the COCs from groundwater within monitoring well PZ-11 and production well CW-6; (d) collecting bi-weekly samples for laboratory analysis of the COCs from groundwater within monitoring well MW-C17 and production well CW-8; and (e) collecting monthly samples for laboratory analysis of the COCs from groundwater within monitoring well PZ-12 and production well CW-9 due to the continued migration of cis-1,2-DCE to the north.² See Figure 1 from 212 Environmental.

II. EPA has Authority to Act in Light of the September 12, 2022 Sampling Results

On numerous occasions, including most recently our call on September 15, 2022, EPA has claimed that it lacks the authority to require action at the Site because: (a) Ameren is not currently under a consent decree; (b) the MCLs have not been exceeded; and (c) the City has active wells without contamination present. EPA's position is patently false—EPA has broad authority to act to protect public health and safety where there is even the slightest *possibility* of an imminent and substantial endangerment to public health or welfare, which has for many years been the case at the Elm Point Wellfield.

EPA has significant authority under CERCLA § 106(a) where “there *may* be an imminent and substantial endangerment to the public health or welfare or the environment because of an actual or threatened release of a hazardous substance from a facility” to either request that the U.S. Department of Justice seek redress in federal court to abate the threat, or “take other action under this section including, but not limited to, issuing such orders as may be necessary to protect public health and welfare and the environment.” 42 U.S.C. §106(a) (emphasis added). EPA has interpreted §106(a) to mean that issuance of unilateral orders is “one of the primary enforcement tools to obtain RD/RA response by PRPs.” See EPA’s [Memorandum](#) regarding Guidance on CERCLA Section 106(a) Unilateral Administrative Orders for Remedial Designs and Remedial Actions, 3 (Mar. 7, 1999).

Unquestionably, all of the elements necessary for EPA to invoke its authority under § 106 are present here. Specifically, the following criteria must be met: (1) a possible imminent and substantial endangerment (“ISE”); (2) because of an actual or threatened release; (3) of a hazardous substance; (4) from a facility. See EPA’s [Memorandum](#) regarding Use of CERCLA § 106 to Address Endangerments That May Also Be Addressed Under Other Environmental Statutes, 4 (Jan. 18, 2001). There is no question that a release of hazardous substances from a facility has occurred.³ The presence of hazardous substances at the Site and in the Elm Point Wellfield, and

² These requests were previously communicated to EPA in emails from Mr. Aselynne on August 18, 2022 and from Mr. Michalski on September 13, 2022.

³ See CERCLA § 101(22) (defining “release” as any spilling, leaking pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment). A release is “usually observable in some manner, whether visually or through analysis showing the presence of hazardous substances in

the fact that these substances were released from nearby facilities, is well documented. And as discussed below, this release of hazardous substances from a facility poses an imminent and substantial endangerment to public health and the City's water supply. Thus, all four criteria necessary for EPA to invoke its authority under CERCLA § 106 have been met, and EPA's continued inaction is a direct threat to the health and safety of the citizens of St. Charles and/or the City's drinking water supply, to which the City strongly objects.

There is more than the possibility of ISE here: ***MCLs have been exceeded*** – the concentration of vinyl chloride detected in CW-6 exceeded the MCL. Vinyl chloride was also detected in the influent at the City's water treatment plant. EPA has found an ISE and/or used its CERCLA §106 authority under numerous, comparable situations. For example, at the West Vermont Drinking Water Contamination Site in Speedway, Marion County, Indiana, EPA determined that vinyl chloride contamination in residential drinking water wells posed an ISE and ordered the PRPs to connect the affected properties to municipal drinking water supply. *See* West Vermont Drinking Water Contamination Site, [Enforcement Action Memorandum](#) (Aug. 5, 2013). Indeed, at the Reynolds Metals Superfund Site, EPA determined that fluoride contamination in groundwater posed an ISE based on its proximity to groundwater production wells within a 1-mile radius and the use of onsite production wells to serve water to employees. *See* Reynolds Metals Superfund Site, [Unilateral Administrative Order for Remedial Design and Remedial Action](#), EPA Docket No. CERCLA 10-2006-0012, 5-6 (Aug. 2005). Recently, Michigan's Department of Environment, Great Lakes, and Energy found an ISE was present where vinyl chloride was detected in monitoring wells *adjacent to* the Village of Milford, Michigan's drinking water wells, requiring among a number of actions, the expedited installation of a treatment system to address the ISE. *See* In the Matter of: ZF Active Safety US Inc., Kelsey-Hayes, Milford, 101 Oak Street, Milford, Oakland County, Michigan, EGLE Docket No. AO-RRD-22-001, [Administrative Order for Response Activity](#), (Mar. 15, 2022).

A number of courts have also held that an ISE was present in circumstances involving *less dire* risks to public drinking water than are present here. *E.g., United States v. Hardage*, 761 F. Supp. 1501 (W.D. Okla. 1990) (finding that hazardous substances in groundwater traveling *toward* an aquifer posed an ISE); *B.F. Goodrich Co. v. Murtha*, 697 F. Supp. 89 (D. Conn. 1988) (concluding that hazardous substances that posed a *risk of migrating* from a landfill through groundwater to nearby resident wells and brook qualified as an ISE); *United States v. Northeastern Pharmaceutical and Chemical Co. ("NEPACCO I")*, 579 F. Supp. 823 (W.D. Mo. 1984) (finding that small quantities of highly toxic hazardous substances that were *reasonably likely to enter groundwater* and contaminate drinking water supply posed an ISE), *aff in part, rev'd in part on*

samples of soil, water, or air." See EPA's Memorandum regarding Use of CERCLA § 106 to Address Endangerments That May Also Be Addressed Under Other Environmental Statutes, 5 (Jan. 18, 2001) (emphasis added). There is no dispute that hazardous substances were released by Ameren and/or the OU-3 PRPs from a nearby facility on the Site. *See* Section 101(9) of CERCLA (defining the term "facility").

other grounds, 810 F.2d 726 (8th Cir. 1986), *cert. denied*, 484 U.S. 848 (1987).⁴ In view of the foregoing, the exceedance of the vinyl chloride MCL in CW-6 and the detection of vinyl chloride in the influent of the City’s water treatment plant constitute an imminent and substantial endangerment to the City’s water supply and the health and safety of its citizens.

EPA has also previously concluded that the Site posed an imminent and substantial endangerment to the City’s water supply, based on less concerning sampling results. For example, in its June 25, 2012 Enforcement Action Memorandum related to the Site, EPA concluded that

Actual or threatened releases of hazardous substances from this Site may present an imminent and substantial endangerment to public health, or welfare, or the environment based on *the presence of VOCs in the aquifer* of the municipal drinking water wellfield ***at levels exceeding remedial actions levels/state standards*** and on the *consistent occurrence of VOCs in municipal PWS drinking water wells above detection limits*.

(Emphasis added). Notably absent from this determination was any reference to exceedances of MCLs. Instead, the presence of VOCs *in the aquifer* above action levels and *in municipal drinking water wells above **detection limits*** was sufficient for EPA to invoke its §106 authority. In response to that threat, EPA determined that in order to protect the City’s drinking water supply the PRPs needed to “[expand] the existing Elm Point Wellfield to replace existing contaminated and threatened public water supply (PWS) wells, [install and operate] a Temporary Containment Well (TCW), [prepare] a drinking water treatment plant contingency Air Stripper Design (ASD) and [perform] additional groundwater and soil investigative work.” See Enforcement Action Memorandum, 1 (Jun. 25, 2012). As discussed above, the situation today is substantially more dire than it was in 2012. At a minimum, the same actions as were required in 2012 are justified in response to the recent sampling results.

The City was also shocked to learn following our call that EPA believes the impacted groundwater production wells are merely auxiliary wells that the City only uses during times of high demand. In short, this is a patent misstatement of fact and the City is bewildered by EPA’s apparent lack of knowledge or concern about the City’s use of its wells after years of oversight at the Site. The City’s impacted groundwater production wells are relied on and used by the City *daily* – these wells are not limited to use during times of high demand.

Of similar concern, EPA appears to believe that the City’s water treatment plant is capable of removing VOCs released by Ameren and the other PRPs from drinking water as part of the treatment process. This is entirely untrue. As EPA is aware, the work required by the 2012 Enforcement Action Memorandum, described above, was never completed—including installation

⁴ These cases should be well known to EPA, as they are cited in its Memorandum regarding Use of CERCLA § 106 to Address Endangerments That May Also Be Addressed Under Other Environmental Statutes, 4-5 (Jan. 18, 2001).

of an air stripping system to remove VOCs. As such, ***urgent action is required*** to ensure that the City has access to an adequate supply of safe, uncontaminated drinking water.

III. The City Requests the Opportunity to Comment on the Current Work Plan and Consent Decree Prior to Finalization

The City only recently learned that Ameren has submitted a work plan to investigate the source of groundwater contamination in the area of the Elm Point Wellfield, and that Ameren intends to use direct push technology to conduct this investigation. The City strongly objects to EPA's stated approach of providing the report to the City only after it has been approved. The City, through 212 Environmental, has repeatedly expressed in the strongest terms its concerns related to the use of direct push technology to conduct this investigation.

According to EPA's own guidance, direct push technology should not be used to investigate volatile organic compounds in groundwater. Direct push groundwater sampling can create strong bias in volatile organic compounds caused by sample disturbance (i.e., pressure decreases, temperature increases, etc.), the sampling interval (may not represent the zones of contamination), and sample cross-contamination (i.e., contaminant drag-down, creating hydraulic conduits, improper decontamination). *See, generally [EPA, Groundwater Sampling and Monitoring with Direct Push Technologies](#)* (Aug. 2005).

Ameren itself has also objected to the use of direct push investigation, stating that “[i]t is well known that direct push technology may be useful for screening purposes at some sites, but it is not a valid basis for final remedial or liability determinations and cannot be used for complex fate and transport evaluations. It is a screening tool – nothing more.” Letter from Susan B. Knowles, Ameren, to DeAndre D. Singletary, EPA Region 7, regarding Ameren Huster Road Substation, St. Charles, Missouri, Data Evaluation and Invitation to Join Settlement Agreement, 2 (Jun. 8, 2012). Ameren goes on to explain that

There are many other potential problems with this technology, which is why EPA usually does not base critical decisions on such screening data. [Direct push samples may be useful] and an inexpensive way for the PRP Group to further its agenda but fairness, the environment, and most important ***public health and safety require that more valid, representative, and reliable data must be created in order to allow all stakeholders to make sound decisions that protect the public water supply.***

Id. (emphasis added). The City reiterates its concerns regarding the use of direct push technology and requests that EPA provide the draft plan to the City for its review and comment as soon as possible, prior to approving the Work Plan. At a minimum, EPA should require Ameren to install permanent groundwater monitoring wells at multiple depths across the Elm Point Wellfield as previously requested by the City and 212 Environmental.

The City also understands that EPA and the Department of Justice are preparing to lodge a consent decree between the United States and Ameren in the U.S. District Court for the Eastern District of Missouri. EPA's stated position that the City can submit comments during the public comment period, and that the remedy set forth in the consent decree can be revisited once the decree is entered, is not acceptable and is insufficient to address the City's immediate concerns. Given the imminent and substantial endangerment of the City's drinking water supply and the health of its citizens, the agreed remedy and terms of the Consent Decree must require Ameren to take immediate action to address this threat. As such, the City renews its request to review this consent decree before lodging.

In summary, EPA has failed to protect the City and its residents from the imminent threat posed by the contamination caused by Ameren and the other PRPs. Rather than taking immediate action to address this threat, EPA has repeatedly diminished the City's concerns. As a result, the City has been forced to incur substantial costs in response to contamination that it did not cause and for which it has no responsibility. The City implores EPA to take swift action to avoid another crisis on the scale of Jackson, Mississippi or Flint, Michigan and use its substantial authority under CERCLA § 106 to resolve this imminent threat to the citizens of St. Charles.

Please contact me to discuss at your earliest convenience.

Sincerely,



Erica M. Spitzig

EMS

Encl.: Attachment A, Sampling Report of 212 Environmental Consulting's sampling of groundwater production wells at the Site at the Elm Point Wellfield (Sept. 12, 2022).

Figure 1, Cis-1,2-Dichloroethene Plume, City of St. Charles Potable Well Field, St. Charles, Missouri (Sept. 26, 2022).

Cc (via email): Tonya Howell (Howell.Tonya@epa.gov)
 Randolph Brown (Brown.Randolph@epa.gov)
 Clint Sperry (sperry.clint@epa.gov)
 Feyi Ilesanmi (feyi.ilesanmi@dnr.mo.gov)
 Brenna McDonald (brenna.mcdonald@dnr.mo.gov)
 Nicholas Galla (Nicholas.Galla@stcharlescitymo.gov)

John Phillips (John.Phillips@stcharlescitymo.gov)
Michael Cullen (Michael.Cullen@stcharlescitymo.gov)
Todd Aseltyne (todd.aseltyne@212environmental.com)
Paul Michalski (paul.michalski@212environmental.com)

Attachment A



ANALYTICAL REPORT

Lab Number:	L2246727
Client:	212 Environmental Consulting, LLC 2021 Auburn Avenue Third Floor Suites Cincinnati, OH 45219
ATTN:	Todd Aselyne
Phone:	(419) 309-0603
Project Name:	ELM POINT WELLFIELD
Project Number:	21-011-03
Report Date:	09/12/22

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2246727-01	CW-4, 08232022	WATER	ST. CHARLES, MISSOURI	08/23/22 16:50	08/29/22
L2246727-02	CW-5, 08232022	WATER	ST. CHARLES, MISSOURI	08/23/22 13:40	08/29/22
L2246727-03	CW-6, 08232022	WATER	ST. CHARLES, MISSOURI	08/23/22 18:50	08/29/22
L2246727-04	CW-7, 08242022	WATER	ST. CHARLES, MISSOURI	08/24/22 15:25	08/29/22
L2246727-05	CW-8, 08242022	WATER	ST. CHARLES, MISSOURI	08/24/22 12:15	08/29/22
L2246727-06	CW-9, 08242022	WATER	ST. CHARLES, MISSOURI	08/24/22 17:30	08/29/22
L2246727-07	CW-10, 08242022	WATER	ST. CHARLES, MISSOURI	08/24/22 13:40	08/29/22
L2246727-08	CP2-1, 08252022	WATER	ST. CHARLES, MISSOURI	08/25/22 17:20	08/29/22
L2246727-09	CP2-2, 08252022	WATER	ST. CHARLES, MISSOURI	08/25/22 14:50	08/29/22
L2246727-10	CP2-3, 08252022	WATER	ST. CHARLES, MISSOURI	08/25/22 12:15	08/29/22
L2246727-11	EFFLUENT, 08232022	WATER	ST. CHARLES, MISSOURI	08/23/22 14:50	08/29/22
L2246727-12	INFLUENT, 08232022	WATER	ST. CHARLES, MISSOURI	08/23/22 15:15	08/29/22
L2246727-13	BD-1	WATER	ST. CHARLES, MISSOURI	08/23/22 00:00	08/29/22
L2246727-14	EB-1	WATER	ST. CHARLES, MISSOURI	08/25/22 00:00	08/29/22

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The collection date and/or time reported has been adjusted to Eastern Standard Time in order to account for the time zone of the state of origin in which the samples were collected.

L2246727-14: The collection date and time on the chain of custody was 23-AUG-22 00:00; however, the collection date/time on the container label was 25-AUG-22 00:00. At the client's request, the collection date/time is reported as 25-AUG-22 00:00.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 09/12/22

ORGANICS



VOLATILES



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID: L2246727-01
 Client ID: CW-4, 08232022
 Sample Location: ST. CHARLES, MISSOURI

Date Collected: 08/23/22 16:50
 Date Received: 08/29/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 09/01/22 18:53
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND	ug/l	3.0	0.68	1	
1,1-Dichloroethane	ND	ug/l	0.75	0.21	1	
Chloroform	ND	ug/l	0.75	0.22	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.8	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	0.75	0.14	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	0.50	0.18	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.16	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	0.50	0.16	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
1,3-Dichloropropene, Total	ND	ug/l	0.50	0.14	1	
1,1-Dichloropropene	ND	ug/l	2.5	0.24	1	
Bromoform	ND	ug/l	2.0	0.25	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	0.75	0.20	1	
Ethylbenzene	ND	ug/l	0.50	0.17	1	
Chloromethane	ND	ug/l	2.5	0.20	1	
Bromomethane	ND	ug/l	1.0	0.26	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	1.0	0.13	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	0.75	0.16	1	



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-01	Date Collected:	08/23/22 16:50
Client ID:	CW-4, 08232022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichloroethene, Total	ND	ug/l	0.50	0.16	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.18	1	
1,3-Dichlorobenzene	ND	ug/l	2.5	0.19	1	
1,4-Dichlorobenzene	ND	ug/l	2.5	0.19	1	
Methyl tert butyl ether	ND	ug/l	1.0	0.17	1	
p/m-Xylene	ND	ug/l	1.0	0.33	1	
o-Xylene	ND	ug/l	1.0	0.39	1	
Xylenes, Total	ND	ug/l	1.0	0.33	1	
cis-1,2-Dichloroethene	ND	ug/l	0.50	0.19	1	
Dibromomethane	ND	ug/l	5.0	0.36	1	
1,4-Dichlorobutane	ND	ug/l	5.0	0.46	1	
1,2,3-Trichloropropane	ND	ug/l	5.0	0.18	1	
Styrene	ND	ug/l	1.0	0.36	1	
Dichlorodifluoromethane	ND	ug/l	5.0	0.24	1	
Acetone	ND	ug/l	5.0	1.5	1	
Carbon disulfide	ND	ug/l	5.0	0.30	1	
2-Butanone	ND	ug/l	5.0	1.9	1	
Vinyl acetate	ND	ug/l	5.0	0.31	1	
4-Methyl-2-pentanone	ND	ug/l	5.0	0.42	1	
2-Hexanone	ND	ug/l	5.0	0.52	1	
Ethyl methacrylate	ND	ug/l	5.0	0.61	1	
Acrylonitrile	ND	ug/l	5.0	0.43	1	
Bromochloromethane	ND	ug/l	2.5	0.15	1	
Tetrahydrofuran	ND	ug/l	5.0	0.52	1	
2,2-Dichloropropane	ND	ug/l	2.5	0.20	1	
1,2-Dibromoethane	ND	ug/l	2.0	0.19	1	
1,3-Dichloropropane	ND	ug/l	2.5	0.21	1	
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50	0.16	1	
Bromobenzene	ND	ug/l	2.5	0.15	1	
n-Butylbenzene	ND	ug/l	0.50	0.19	1	
sec-Butylbenzene	ND	ug/l	0.50	0.18	1	
tert-Butylbenzene	ND	ug/l	2.5	0.20	1	
o-Chlorotoluene	ND	ug/l	2.5	0.22	1	
p-Chlorotoluene	ND	ug/l	2.5	0.18	1	
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.35	1	
Hexachlorobutadiene	ND	ug/l	0.50	0.22	1	



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-01	Date Collected:	08/23/22 16:50
Client ID:	CW-4, 08232022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Isopropylbenzene	ND		ug/l	0.50	0.19	1
p-Isopropyltoluene	ND		ug/l	0.50	0.19	1
Naphthalene	ND		ug/l	2.5	0.22	1
n-Propylbenzene	ND		ug/l	0.50	0.17	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.21	1
Ethyl ether	ND		ug/l	2.5	0.16	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	106		70-130

Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID: L2246727-02
 Client ID: CW-5, 08232022
 Sample Location: ST. CHARLES, MISSOURI

Date Collected: 08/23/22 13:40
 Date Received: 08/29/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 09/01/22 19:12
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND	ug/l	3.0	0.68	1	
1,1-Dichloroethane	ND	ug/l	0.75	0.21	1	
Chloroform	ND	ug/l	0.75	0.22	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.8	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	0.75	0.14	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	0.50	0.18	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.16	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	0.50	0.16	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
1,3-Dichloropropene, Total	ND	ug/l	0.50	0.14	1	
1,1-Dichloropropene	ND	ug/l	2.5	0.24	1	
Bromoform	ND	ug/l	2.0	0.25	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	0.75	0.20	1	
Ethylbenzene	ND	ug/l	0.50	0.17	1	
Chloromethane	ND	ug/l	2.5	0.20	1	
Bromomethane	ND	ug/l	1.0	0.26	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	1.0	0.13	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	0.75	0.16	1	



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-02	Date Collected:	08/23/22 13:40
Client ID:	CW-5, 08232022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichloroethene, Total	ND	ug/l	0.50	0.16	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.18	1	
1,3-Dichlorobenzene	ND	ug/l	2.5	0.19	1	
1,4-Dichlorobenzene	ND	ug/l	2.5	0.19	1	
Methyl tert butyl ether	ND	ug/l	1.0	0.17	1	
p/m-Xylene	ND	ug/l	1.0	0.33	1	
o-Xylene	ND	ug/l	1.0	0.39	1	
Xylenes, Total	ND	ug/l	1.0	0.33	1	
cis-1,2-Dichloroethene	ND	ug/l	0.50	0.19	1	
Dibromomethane	ND	ug/l	5.0	0.36	1	
1,4-Dichlorobutane	ND	ug/l	5.0	0.46	1	
1,2,3-Trichloropropane	ND	ug/l	5.0	0.18	1	
Styrene	ND	ug/l	1.0	0.36	1	
Dichlorodifluoromethane	ND	ug/l	5.0	0.24	1	
Acetone	ND	ug/l	5.0	1.5	1	
Carbon disulfide	ND	ug/l	5.0	0.30	1	
2-Butanone	ND	ug/l	5.0	1.9	1	
Vinyl acetate	ND	ug/l	5.0	0.31	1	
4-Methyl-2-pentanone	ND	ug/l	5.0	0.42	1	
2-Hexanone	ND	ug/l	5.0	0.52	1	
Ethyl methacrylate	ND	ug/l	5.0	0.61	1	
Acrylonitrile	ND	ug/l	5.0	0.43	1	
Bromochloromethane	ND	ug/l	2.5	0.15	1	
Tetrahydrofuran	ND	ug/l	5.0	0.52	1	
2,2-Dichloropropane	ND	ug/l	2.5	0.20	1	
1,2-Dibromoethane	ND	ug/l	2.0	0.19	1	
1,3-Dichloropropane	ND	ug/l	2.5	0.21	1	
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50	0.16	1	
Bromobenzene	ND	ug/l	2.5	0.15	1	
n-Butylbenzene	ND	ug/l	0.50	0.19	1	
sec-Butylbenzene	ND	ug/l	0.50	0.18	1	
tert-Butylbenzene	ND	ug/l	2.5	0.20	1	
o-Chlorotoluene	ND	ug/l	2.5	0.22	1	
p-Chlorotoluene	ND	ug/l	2.5	0.18	1	
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.35	1	
Hexachlorobutadiene	ND	ug/l	0.50	0.22	1	



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID: L2246727-02
 Client ID: CW-5, 08232022
 Sample Location: ST. CHARLES, MISSOURI

Date Collected: 08/23/22 13:40
 Date Received: 08/29/22
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Isopropylbenzene	ND		ug/l	0.50	0.19	1
p-Isopropyltoluene	ND		ug/l	0.50	0.19	1
Naphthalene	ND		ug/l	2.5	0.22	1
n-Propylbenzene	ND		ug/l	0.50	0.17	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.21	1
Ethyl ether	ND		ug/l	2.5	0.16	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	108		70-130

Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID: L2246727-03
 Client ID: CW-6, 08232022
 Sample Location: ST. CHARLES, MISSOURI

Date Collected: 08/23/22 18:50
 Date Received: 08/29/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 09/01/22 19:32
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	0.68	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.8	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.24	1
Bromoform	ND		ug/l	2.0	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
Chloromethane	ND		ug/l	2.5	0.20	1
Bromomethane	ND		ug/l	1.0	0.26	1
Vinyl chloride	2.1		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	1.0	0.13	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-03	Date Collected:	08/23/22 18:50
Client ID:	CW-6, 08232022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichloroethene, Total	0.84		ug/l	0.50	0.16	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
cis-1,2-Dichloroethene	0.84		ug/l	0.50	0.19	1
Dibromomethane	ND		ug/l	5.0	0.36	1
1,4-Dichlorobutane	ND		ug/l	5.0	0.46	1
1,2,3-Trichloropropane	ND		ug/l	5.0	0.18	1
Styrene	ND		ug/l	1.0	0.36	1
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Acetone	2.5	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	0.31	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Ethyl methacrylate	ND		ug/l	5.0	0.61	1
Acrylonitrile	ND		ug/l	5.0	0.43	1
Bromochloromethane	ND		ug/l	2.5	0.15	1
Tetrahydrofuran	ND		ug/l	5.0	0.52	1
2,2-Dichloropropane	ND		ug/l	2.5	0.20	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
1,3-Dichloropropane	ND		ug/l	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.16	1
Bromobenzene	ND		ug/l	2.5	0.15	1
n-Butylbenzene	ND		ug/l	0.50	0.19	1
sec-Butylbenzene	ND		ug/l	0.50	0.18	1
tert-Butylbenzene	ND		ug/l	2.5	0.20	1
o-Chlorotoluene	ND		ug/l	2.5	0.22	1
p-Chlorotoluene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
Hexachlorobutadiene	ND		ug/l	0.50	0.22	1



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-03	Date Collected:	08/23/22 18:50
Client ID:	CW-6, 08232022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Isopropylbenzene	ND		ug/l	0.50	0.19	1
p-Isopropyltoluene	ND		ug/l	0.50	0.19	1
Naphthalene	ND		ug/l	2.5	0.22	1
n-Propylbenzene	ND		ug/l	0.50	0.17	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.21	1
Ethyl ether	ND		ug/l	2.5	0.16	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	106		70-130

Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID: L2246727-04
 Client ID: CW-7, 08242022
 Sample Location: ST. CHARLES, MISSOURI

Date Collected: 08/24/22 15:25
 Date Received: 08/29/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 09/02/22 10:38
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	0.68	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.8	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.24	1
Bromoform	ND		ug/l	2.0	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
Chloromethane	ND		ug/l	2.5	0.20	1
Bromomethane	ND		ug/l	1.0	0.26	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	1.0	0.13	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-04	Date Collected:	08/24/22 15:25
Client ID:	CW-7, 08242022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichloroethene, Total	ND	ug/l	0.50	0.16	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.18	1	
1,3-Dichlorobenzene	ND	ug/l	2.5	0.19	1	
1,4-Dichlorobenzene	ND	ug/l	2.5	0.19	1	
Methyl tert butyl ether	ND	ug/l	1.0	0.17	1	
p/m-Xylene	ND	ug/l	1.0	0.33	1	
o-Xylene	ND	ug/l	1.0	0.39	1	
Xylenes, Total	ND	ug/l	1.0	0.33	1	
cis-1,2-Dichloroethene	ND	ug/l	0.50	0.19	1	
Dibromomethane	ND	ug/l	5.0	0.36	1	
1,4-Dichlorobutane	ND	ug/l	5.0	0.46	1	
1,2,3-Trichloropropane	ND	ug/l	5.0	0.18	1	
Styrene	ND	ug/l	1.0	0.36	1	
Dichlorodifluoromethane	ND	ug/l	5.0	0.24	1	
Acetone	ND	ug/l	5.0	1.5	1	
Carbon disulfide	ND	ug/l	5.0	0.30	1	
2-Butanone	ND	ug/l	5.0	1.9	1	
Vinyl acetate	ND	ug/l	5.0	0.31	1	
4-Methyl-2-pentanone	ND	ug/l	5.0	0.42	1	
2-Hexanone	ND	ug/l	5.0	0.52	1	
Ethyl methacrylate	ND	ug/l	5.0	0.61	1	
Acrylonitrile	ND	ug/l	5.0	0.43	1	
Bromochloromethane	ND	ug/l	2.5	0.15	1	
Tetrahydrofuran	ND	ug/l	5.0	0.52	1	
2,2-Dichloropropane	ND	ug/l	2.5	0.20	1	
1,2-Dibromoethane	ND	ug/l	2.0	0.19	1	
1,3-Dichloropropane	ND	ug/l	2.5	0.21	1	
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50	0.16	1	
Bromobenzene	ND	ug/l	2.5	0.15	1	
n-Butylbenzene	ND	ug/l	0.50	0.19	1	
sec-Butylbenzene	ND	ug/l	0.50	0.18	1	
tert-Butylbenzene	ND	ug/l	2.5	0.20	1	
o-Chlorotoluene	ND	ug/l	2.5	0.22	1	
p-Chlorotoluene	ND	ug/l	2.5	0.18	1	
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.35	1	
Hexachlorobutadiene	ND	ug/l	0.50	0.22	1	



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID: L2246727-04
 Client ID: CW-7, 08242022
 Sample Location: ST. CHARLES, MISSOURI

Date Collected: 08/24/22 15:25
 Date Received: 08/29/22
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Isopropylbenzene	ND		ug/l	0.50	0.19	1
p-Isopropyltoluene	ND		ug/l	0.50	0.19	1
Naphthalene	ND		ug/l	2.5	0.22	1
n-Propylbenzene	ND		ug/l	0.50	0.17	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.21	1
Ethyl ether	ND		ug/l	2.5	0.16	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	106		70-130

Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID: L2246727-05
 Client ID: CW-8, 08242022
 Sample Location: ST. CHARLES, MISSOURI

Date Collected: 08/24/22 12:15
 Date Received: 08/29/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 09/01/22 19:52
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	0.68	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.8	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.24	1
Bromoform	ND		ug/l	2.0	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
Chloromethane	ND		ug/l	2.5	0.20	1
Bromomethane	ND		ug/l	1.0	0.26	1
Vinyl chloride	0.68	J	ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	1.0	0.13	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-05	Date Collected:	08/24/22 12:15
Client ID:	CW-8, 08242022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichloroethene, Total	0.36	J	ug/l	0.50	0.16	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
cis-1,2-Dichloroethene	0.36	J	ug/l	0.50	0.19	1
Dibromomethane	ND		ug/l	5.0	0.36	1
1,4-Dichlorobutane	ND		ug/l	5.0	0.46	1
1,2,3-Trichloropropane	ND		ug/l	5.0	0.18	1
Styrene	ND		ug/l	1.0	0.36	1
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	0.31	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Ethyl methacrylate	ND		ug/l	5.0	0.61	1
Acrylonitrile	ND		ug/l	5.0	0.43	1
Bromochloromethane	ND		ug/l	2.5	0.15	1
Tetrahydrofuran	ND		ug/l	5.0	0.52	1
2,2-Dichloropropane	ND		ug/l	2.5	0.20	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
1,3-Dichloropropane	ND		ug/l	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.16	1
Bromobenzene	ND		ug/l	2.5	0.15	1
n-Butylbenzene	ND		ug/l	0.50	0.19	1
sec-Butylbenzene	ND		ug/l	0.50	0.18	1
tert-Butylbenzene	ND		ug/l	2.5	0.20	1
o-Chlorotoluene	ND		ug/l	2.5	0.22	1
p-Chlorotoluene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
Hexachlorobutadiene	ND		ug/l	0.50	0.22	1



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-05	Date Collected:	08/24/22 12:15
Client ID:	CW-8, 08242022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Isopropylbenzene	ND		ug/l	0.50	0.19	1
p-Isopropyltoluene	ND		ug/l	0.50	0.19	1
Naphthalene	ND		ug/l	2.5	0.22	1
n-Propylbenzene	ND		ug/l	0.50	0.17	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.21	1
Ethyl ether	ND		ug/l	2.5	0.16	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	105		70-130

Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID: L2246727-06
 Client ID: CW-9, 08242022
 Sample Location: ST. CHARLES, MISSOURI

Date Collected: 08/24/22 17:30
 Date Received: 08/29/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 09/01/22 20:11
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND	ug/l	3.0	0.68	1	
1,1-Dichloroethane	ND	ug/l	0.75	0.21	1	
Chloroform	ND	ug/l	0.75	0.22	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.8	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	0.75	0.14	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	0.50	0.18	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.16	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	0.50	0.16	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
1,3-Dichloropropene, Total	ND	ug/l	0.50	0.14	1	
1,1-Dichloropropene	ND	ug/l	2.5	0.24	1	
Bromoform	ND	ug/l	2.0	0.25	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	0.75	0.20	1	
Ethylbenzene	ND	ug/l	0.50	0.17	1	
Chloromethane	ND	ug/l	2.5	0.20	1	
Bromomethane	ND	ug/l	1.0	0.26	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	1.0	0.13	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	0.75	0.16	1	



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-06	Date Collected:	08/24/22 17:30
Client ID:	CW-9, 08242022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichloroethene, Total	ND	ug/l	0.50	0.16	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.18	1	
1,3-Dichlorobenzene	ND	ug/l	2.5	0.19	1	
1,4-Dichlorobenzene	ND	ug/l	2.5	0.19	1	
Methyl tert butyl ether	ND	ug/l	1.0	0.17	1	
p/m-Xylene	ND	ug/l	1.0	0.33	1	
o-Xylene	ND	ug/l	1.0	0.39	1	
Xylenes, Total	ND	ug/l	1.0	0.33	1	
cis-1,2-Dichloroethene	ND	ug/l	0.50	0.19	1	
Dibromomethane	ND	ug/l	5.0	0.36	1	
1,4-Dichlorobutane	ND	ug/l	5.0	0.46	1	
1,2,3-Trichloropropane	ND	ug/l	5.0	0.18	1	
Styrene	ND	ug/l	1.0	0.36	1	
Dichlorodifluoromethane	ND	ug/l	5.0	0.24	1	
Acetone	ND	ug/l	5.0	1.5	1	
Carbon disulfide	ND	ug/l	5.0	0.30	1	
2-Butanone	ND	ug/l	5.0	1.9	1	
Vinyl acetate	ND	ug/l	5.0	0.31	1	
4-Methyl-2-pentanone	ND	ug/l	5.0	0.42	1	
2-Hexanone	ND	ug/l	5.0	0.52	1	
Ethyl methacrylate	ND	ug/l	5.0	0.61	1	
Acrylonitrile	ND	ug/l	5.0	0.43	1	
Bromochloromethane	ND	ug/l	2.5	0.15	1	
Tetrahydrofuran	ND	ug/l	5.0	0.52	1	
2,2-Dichloropropane	ND	ug/l	2.5	0.20	1	
1,2-Dibromoethane	ND	ug/l	2.0	0.19	1	
1,3-Dichloropropane	ND	ug/l	2.5	0.21	1	
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50	0.16	1	
Bromobenzene	ND	ug/l	2.5	0.15	1	
n-Butylbenzene	ND	ug/l	0.50	0.19	1	
sec-Butylbenzene	ND	ug/l	0.50	0.18	1	
tert-Butylbenzene	ND	ug/l	2.5	0.20	1	
o-Chlorotoluene	ND	ug/l	2.5	0.22	1	
p-Chlorotoluene	ND	ug/l	2.5	0.18	1	
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.35	1	
Hexachlorobutadiene	ND	ug/l	0.50	0.22	1	



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-06	Date Collected:	08/24/22 17:30
Client ID:	CW-9, 08242022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Isopropylbenzene	ND		ug/l	0.50	0.19	1
p-Isopropyltoluene	ND		ug/l	0.50	0.19	1
Naphthalene	ND		ug/l	2.5	0.22	1
n-Propylbenzene	ND		ug/l	0.50	0.17	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.21	1
Ethyl ether	ND		ug/l	2.5	0.16	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	105		70-130

Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID: L2246727-07
 Client ID: CW-10, 08242022
 Sample Location: ST. CHARLES, MISSOURI

Date Collected: 08/24/22 13:40
 Date Received: 08/29/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 09/01/22 20:31
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND	ug/l	3.0	0.68	1	
1,1-Dichloroethane	ND	ug/l	0.75	0.21	1	
Chloroform	ND	ug/l	0.75	0.22	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.8	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	0.75	0.14	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	0.50	0.18	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.16	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	0.50	0.16	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
1,3-Dichloropropene, Total	ND	ug/l	0.50	0.14	1	
1,1-Dichloropropene	ND	ug/l	2.5	0.24	1	
Bromoform	ND	ug/l	2.0	0.25	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	0.75	0.20	1	
Ethylbenzene	ND	ug/l	0.50	0.17	1	
Chloromethane	ND	ug/l	2.5	0.20	1	
Bromomethane	ND	ug/l	1.0	0.26	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	1.0	0.13	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	0.75	0.16	1	



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-07	Date Collected:	08/24/22 13:40
Client ID:	CW-10, 08242022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichloroethene, Total	ND	ug/l	0.50	0.16	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.18	1	
1,3-Dichlorobenzene	ND	ug/l	2.5	0.19	1	
1,4-Dichlorobenzene	ND	ug/l	2.5	0.19	1	
Methyl tert butyl ether	ND	ug/l	1.0	0.17	1	
p/m-Xylene	ND	ug/l	1.0	0.33	1	
o-Xylene	ND	ug/l	1.0	0.39	1	
Xylenes, Total	ND	ug/l	1.0	0.33	1	
cis-1,2-Dichloroethene	ND	ug/l	0.50	0.19	1	
Dibromomethane	ND	ug/l	5.0	0.36	1	
1,4-Dichlorobutane	ND	ug/l	5.0	0.46	1	
1,2,3-Trichloropropane	ND	ug/l	5.0	0.18	1	
Styrene	ND	ug/l	1.0	0.36	1	
Dichlorodifluoromethane	ND	ug/l	5.0	0.24	1	
Acetone	ND	ug/l	5.0	1.5	1	
Carbon disulfide	ND	ug/l	5.0	0.30	1	
2-Butanone	ND	ug/l	5.0	1.9	1	
Vinyl acetate	ND	ug/l	5.0	0.31	1	
4-Methyl-2-pentanone	ND	ug/l	5.0	0.42	1	
2-Hexanone	ND	ug/l	5.0	0.52	1	
Ethyl methacrylate	ND	ug/l	5.0	0.61	1	
Acrylonitrile	ND	ug/l	5.0	0.43	1	
Bromochloromethane	ND	ug/l	2.5	0.15	1	
Tetrahydrofuran	ND	ug/l	5.0	0.52	1	
2,2-Dichloropropane	ND	ug/l	2.5	0.20	1	
1,2-Dibromoethane	ND	ug/l	2.0	0.19	1	
1,3-Dichloropropane	ND	ug/l	2.5	0.21	1	
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50	0.16	1	
Bromobenzene	ND	ug/l	2.5	0.15	1	
n-Butylbenzene	ND	ug/l	0.50	0.19	1	
sec-Butylbenzene	ND	ug/l	0.50	0.18	1	
tert-Butylbenzene	ND	ug/l	2.5	0.20	1	
o-Chlorotoluene	ND	ug/l	2.5	0.22	1	
p-Chlorotoluene	ND	ug/l	2.5	0.18	1	
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.35	1	
Hexachlorobutadiene	ND	ug/l	0.50	0.22	1	



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-07	Date Collected:	08/24/22 13:40
Client ID:	CW-10, 08242022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Isopropylbenzene	ND		ug/l	0.50	0.19	1
p-Isopropyltoluene	ND		ug/l	0.50	0.19	1
Naphthalene	ND		ug/l	2.5	0.22	1
n-Propylbenzene	ND		ug/l	0.50	0.17	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.21	1
Ethyl ether	ND		ug/l	2.5	0.16	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	105		70-130

Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID: L2246727-08
 Client ID: CP2-1, 08252022
 Sample Location: ST. CHARLES, MISSOURI

Date Collected: 08/25/22 17:20
 Date Received: 08/29/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 09/01/22 20:51
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	0.68	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.8	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.24	1
Bromoform	ND		ug/l	2.0	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
Chloromethane	ND		ug/l	2.5	0.20	1
Bromomethane	ND		ug/l	1.0	0.26	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	1.0	0.13	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-08	Date Collected:	08/25/22 17:20
Client ID:	CP2-1, 08252022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichloroethene, Total	ND		ug/l	0.50	0.16	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Dibromomethane	ND		ug/l	5.0	0.36	1
1,4-Dichlorobutane	ND		ug/l	5.0	0.46	1
1,2,3-Trichloropropane	ND		ug/l	5.0	0.18	1
Styrene	ND		ug/l	1.0	0.36	1
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Acetone	2.8	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	0.31	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Ethyl methacrylate	ND		ug/l	5.0	0.61	1
Acrylonitrile	ND		ug/l	5.0	0.43	1
Bromochloromethane	ND		ug/l	2.5	0.15	1
Tetrahydrofuran	ND		ug/l	5.0	0.52	1
2,2-Dichloropropane	ND		ug/l	2.5	0.20	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
1,3-Dichloropropane	ND		ug/l	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.16	1
Bromobenzene	ND		ug/l	2.5	0.15	1
n-Butylbenzene	ND		ug/l	0.50	0.19	1
sec-Butylbenzene	ND		ug/l	0.50	0.18	1
tert-Butylbenzene	ND		ug/l	2.5	0.20	1
o-Chlorotoluene	ND		ug/l	2.5	0.22	1
p-Chlorotoluene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
Hexachlorobutadiene	ND		ug/l	0.50	0.22	1



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-08	Date Collected:	08/25/22 17:20
Client ID:	CP2-1, 08252022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Isopropylbenzene	ND		ug/l	0.50	0.19	1
p-Isopropyltoluene	ND		ug/l	0.50	0.19	1
Naphthalene	ND		ug/l	2.5	0.22	1
n-Propylbenzene	ND		ug/l	0.50	0.17	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.21	1
Ethyl ether	ND		ug/l	2.5	0.16	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	108		70-130

Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID: L2246727-09
 Client ID: CP2-2, 08252022
 Sample Location: ST. CHARLES, MISSOURI

Date Collected: 08/25/22 14:50
 Date Received: 08/29/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 09/01/22 21:10
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	0.68	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.8	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.24	1
Bromoform	ND		ug/l	2.0	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
Chloromethane	ND		ug/l	2.5	0.20	1
Bromomethane	ND		ug/l	1.0	0.26	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	1.0	0.13	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-09	Date Collected:	08/25/22 14:50
Client ID:	CP2-2, 08252022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichloroethene, Total	ND	ug/l	0.50	0.16	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.18	1	
1,3-Dichlorobenzene	ND	ug/l	2.5	0.19	1	
1,4-Dichlorobenzene	ND	ug/l	2.5	0.19	1	
Methyl tert butyl ether	ND	ug/l	1.0	0.17	1	
p/m-Xylene	ND	ug/l	1.0	0.33	1	
o-Xylene	ND	ug/l	1.0	0.39	1	
Xylenes, Total	ND	ug/l	1.0	0.33	1	
cis-1,2-Dichloroethene	ND	ug/l	0.50	0.19	1	
Dibromomethane	ND	ug/l	5.0	0.36	1	
1,4-Dichlorobutane	ND	ug/l	5.0	0.46	1	
1,2,3-Trichloropropane	ND	ug/l	5.0	0.18	1	
Styrene	ND	ug/l	1.0	0.36	1	
Dichlorodifluoromethane	ND	ug/l	5.0	0.24	1	
Acetone	ND	ug/l	5.0	1.5	1	
Carbon disulfide	ND	ug/l	5.0	0.30	1	
2-Butanone	ND	ug/l	5.0	1.9	1	
Vinyl acetate	ND	ug/l	5.0	0.31	1	
4-Methyl-2-pentanone	ND	ug/l	5.0	0.42	1	
2-Hexanone	ND	ug/l	5.0	0.52	1	
Ethyl methacrylate	ND	ug/l	5.0	0.61	1	
Acrylonitrile	ND	ug/l	5.0	0.43	1	
Bromochloromethane	ND	ug/l	2.5	0.15	1	
Tetrahydrofuran	ND	ug/l	5.0	0.52	1	
2,2-Dichloropropane	ND	ug/l	2.5	0.20	1	
1,2-Dibromoethane	ND	ug/l	2.0	0.19	1	
1,3-Dichloropropane	ND	ug/l	2.5	0.21	1	
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50	0.16	1	
Bromobenzene	ND	ug/l	2.5	0.15	1	
n-Butylbenzene	ND	ug/l	0.50	0.19	1	
sec-Butylbenzene	ND	ug/l	0.50	0.18	1	
tert-Butylbenzene	ND	ug/l	2.5	0.20	1	
o-Chlorotoluene	ND	ug/l	2.5	0.22	1	
p-Chlorotoluene	ND	ug/l	2.5	0.18	1	
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.35	1	
Hexachlorobutadiene	ND	ug/l	0.50	0.22	1	



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-09	Date Collected:	08/25/22 14:50
Client ID:	CP2-2, 08252022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Isopropylbenzene	ND		ug/l	0.50	0.19	1
p-Isopropyltoluene	ND		ug/l	0.50	0.19	1
Naphthalene	ND		ug/l	2.5	0.22	1
n-Propylbenzene	ND		ug/l	0.50	0.17	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.21	1
Ethyl ether	ND		ug/l	2.5	0.16	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	106		70-130

Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID: L2246727-10
 Client ID: CP2-3, 08252022
 Sample Location: ST. CHARLES, MISSOURI

Date Collected: 08/25/22 12:15
 Date Received: 08/29/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 09/01/22 21:30
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	0.68	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.8	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.24	1
Bromoform	ND		ug/l	2.0	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
Chloromethane	ND		ug/l	2.5	0.20	1
Bromomethane	ND		ug/l	1.0	0.26	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	1.0	0.13	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-10	Date Collected:	08/25/22 12:15
Client ID:	CP2-3, 08252022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichloroethene, Total	ND	ug/l	0.50	0.16	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.18	1	
1,3-Dichlorobenzene	ND	ug/l	2.5	0.19	1	
1,4-Dichlorobenzene	ND	ug/l	2.5	0.19	1	
Methyl tert butyl ether	ND	ug/l	1.0	0.17	1	
p/m-Xylene	ND	ug/l	1.0	0.33	1	
o-Xylene	ND	ug/l	1.0	0.39	1	
Xylenes, Total	ND	ug/l	1.0	0.33	1	
cis-1,2-Dichloroethene	ND	ug/l	0.50	0.19	1	
Dibromomethane	ND	ug/l	5.0	0.36	1	
1,4-Dichlorobutane	ND	ug/l	5.0	0.46	1	
1,2,3-Trichloropropane	ND	ug/l	5.0	0.18	1	
Styrene	ND	ug/l	1.0	0.36	1	
Dichlorodifluoromethane	ND	ug/l	5.0	0.24	1	
Acetone	ND	ug/l	5.0	1.5	1	
Carbon disulfide	ND	ug/l	5.0	0.30	1	
2-Butanone	ND	ug/l	5.0	1.9	1	
Vinyl acetate	ND	ug/l	5.0	0.31	1	
4-Methyl-2-pentanone	ND	ug/l	5.0	0.42	1	
2-Hexanone	ND	ug/l	5.0	0.52	1	
Ethyl methacrylate	ND	ug/l	5.0	0.61	1	
Acrylonitrile	ND	ug/l	5.0	0.43	1	
Bromochloromethane	ND	ug/l	2.5	0.15	1	
Tetrahydrofuran	ND	ug/l	5.0	0.52	1	
2,2-Dichloropropane	ND	ug/l	2.5	0.20	1	
1,2-Dibromoethane	ND	ug/l	2.0	0.19	1	
1,3-Dichloropropane	ND	ug/l	2.5	0.21	1	
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50	0.16	1	
Bromobenzene	ND	ug/l	2.5	0.15	1	
n-Butylbenzene	ND	ug/l	0.50	0.19	1	
sec-Butylbenzene	ND	ug/l	0.50	0.18	1	
tert-Butylbenzene	ND	ug/l	2.5	0.20	1	
o-Chlorotoluene	ND	ug/l	2.5	0.22	1	
p-Chlorotoluene	ND	ug/l	2.5	0.18	1	
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.35	1	
Hexachlorobutadiene	ND	ug/l	0.50	0.22	1	



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-10	Date Collected:	08/25/22 12:15
Client ID:	CP2-3, 08252022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Isopropylbenzene	ND		ug/l	0.50	0.19	1
p-Isopropyltoluene	ND		ug/l	0.50	0.19	1
Naphthalene	ND		ug/l	2.5	0.22	1
n-Propylbenzene	ND		ug/l	0.50	0.17	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.21	1
Ethyl ether	ND		ug/l	2.5	0.16	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	108		70-130

Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID: L2246727-11
 Client ID: EFFLUENT, 08232022
 Sample Location: ST. CHARLES, MISSOURI

Date Collected: 08/23/22 14:50
 Date Received: 08/29/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 09/01/22 21:50
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	0.68	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.8	0.14	1
Dibromochloromethane	0.53		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.24	1
Bromoform	0.36	J	ug/l	2.0	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
Chloromethane	ND		ug/l	2.5	0.20	1
Bromomethane	ND		ug/l	1.0	0.26	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	1.0	0.13	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-11	Date Collected:	08/23/22 14:50
Client ID:	EFFLUENT, 08232022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichloroethene, Total	ND		ug/l	0.50	0.16	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Dibromomethane	ND		ug/l	5.0	0.36	1
1,4-Dichlorobutane	ND		ug/l	5.0	0.46	1
1,2,3-Trichloropropane	ND		ug/l	5.0	0.18	1
Styrene	ND		ug/l	1.0	0.36	1
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Acetone	3.5	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	0.31	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Ethyl methacrylate	ND		ug/l	5.0	0.61	1
Acrylonitrile	ND		ug/l	5.0	0.43	1
Bromochloromethane	ND		ug/l	2.5	0.15	1
Tetrahydrofuran	ND		ug/l	5.0	0.52	1
2,2-Dichloropropane	ND		ug/l	2.5	0.20	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
1,3-Dichloropropane	ND		ug/l	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.16	1
Bromobenzene	ND		ug/l	2.5	0.15	1
n-Butylbenzene	ND		ug/l	0.50	0.19	1
sec-Butylbenzene	ND		ug/l	0.50	0.18	1
tert-Butylbenzene	ND		ug/l	2.5	0.20	1
o-Chlorotoluene	ND		ug/l	2.5	0.22	1
p-Chlorotoluene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
Hexachlorobutadiene	ND		ug/l	0.50	0.22	1



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-11	Date Collected:	08/23/22 14:50
Client ID:	EFFLUENT, 08232022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Isopropylbenzene	ND		ug/l	0.50	0.19	1
p-Isopropyltoluene	ND		ug/l	0.50	0.19	1
Naphthalene	ND		ug/l	2.5	0.22	1
n-Propylbenzene	ND		ug/l	0.50	0.17	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.21	1
Ethyl ether	ND		ug/l	2.5	0.16	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	107		70-130

Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID: L2246727-12
 Client ID: INFLUENT, 08232022
 Sample Location: ST. CHARLES, MISSOURI

Date Collected: 08/23/22 15:15
 Date Received: 08/29/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 09/01/22 22:09
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	0.68	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
Chloroform	ND		ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.8	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.24	1
Bromoform	ND		ug/l	2.0	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
Chloromethane	ND		ug/l	2.5	0.20	1
Bromomethane	ND		ug/l	1.0	0.26	1
Vinyl chloride	0.11	J	ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	1.0	0.13	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-12	Date Collected:	08/23/22 15:15
Client ID:	INFLUENT, 08232022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichloroethene, Total	ND	ug/l	0.50	0.16	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.18	1	
1,3-Dichlorobenzene	ND	ug/l	2.5	0.19	1	
1,4-Dichlorobenzene	ND	ug/l	2.5	0.19	1	
Methyl tert butyl ether	ND	ug/l	1.0	0.17	1	
p/m-Xylene	ND	ug/l	1.0	0.33	1	
o-Xylene	ND	ug/l	1.0	0.39	1	
Xylenes, Total	ND	ug/l	1.0	0.33	1	
cis-1,2-Dichloroethene	ND	ug/l	0.50	0.19	1	
Dibromomethane	ND	ug/l	5.0	0.36	1	
1,4-Dichlorobutane	ND	ug/l	5.0	0.46	1	
1,2,3-Trichloropropane	ND	ug/l	5.0	0.18	1	
Styrene	ND	ug/l	1.0	0.36	1	
Dichlorodifluoromethane	ND	ug/l	5.0	0.24	1	
Acetone	ND	ug/l	5.0	1.5	1	
Carbon disulfide	ND	ug/l	5.0	0.30	1	
2-Butanone	ND	ug/l	5.0	1.9	1	
Vinyl acetate	ND	ug/l	5.0	0.31	1	
4-Methyl-2-pentanone	ND	ug/l	5.0	0.42	1	
2-Hexanone	ND	ug/l	5.0	0.52	1	
Ethyl methacrylate	ND	ug/l	5.0	0.61	1	
Acrylonitrile	ND	ug/l	5.0	0.43	1	
Bromochloromethane	ND	ug/l	2.5	0.15	1	
Tetrahydrofuran	ND	ug/l	5.0	0.52	1	
2,2-Dichloropropane	ND	ug/l	2.5	0.20	1	
1,2-Dibromoethane	ND	ug/l	2.0	0.19	1	
1,3-Dichloropropane	ND	ug/l	2.5	0.21	1	
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50	0.16	1	
Bromobenzene	ND	ug/l	2.5	0.15	1	
n-Butylbenzene	ND	ug/l	0.50	0.19	1	
sec-Butylbenzene	ND	ug/l	0.50	0.18	1	
tert-Butylbenzene	ND	ug/l	2.5	0.20	1	
o-Chlorotoluene	ND	ug/l	2.5	0.22	1	
p-Chlorotoluene	ND	ug/l	2.5	0.18	1	
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.35	1	
Hexachlorobutadiene	ND	ug/l	0.50	0.22	1	



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-12	Date Collected:	08/23/22 15:15
Client ID:	INFLUENT, 08232022	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Isopropylbenzene	ND		ug/l	0.50	0.19	1
p-Isopropyltoluene	ND		ug/l	0.50	0.19	1
Naphthalene	ND		ug/l	2.5	0.22	1
n-Propylbenzene	ND		ug/l	0.50	0.17	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.21	1
Ethyl ether	ND		ug/l	2.5	0.16	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	108		70-130

Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID: L2246727-13
 Client ID: BD-1
 Sample Location: ST. CHARLES, MISSOURI

Date Collected: 08/23/22 00:00
 Date Received: 08/29/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 09/01/22 22:29
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND	ug/l	3.0	0.68	1	
1,1-Dichloroethane	ND	ug/l	0.75	0.21	1	
Chloroform	ND	ug/l	0.75	0.22	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.8	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	0.75	0.14	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	0.50	0.18	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.16	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	0.50	0.16	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
1,3-Dichloropropene, Total	ND	ug/l	0.50	0.14	1	
1,1-Dichloropropene	ND	ug/l	2.5	0.24	1	
Bromoform	ND	ug/l	2.0	0.25	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	0.75	0.20	1	
Ethylbenzene	ND	ug/l	0.50	0.17	1	
Chloromethane	ND	ug/l	2.5	0.20	1	
Bromomethane	ND	ug/l	1.0	0.26	1	
Vinyl chloride	2.2	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	1.0	0.13	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	0.75	0.16	1	



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-13	Date Collected:	08/23/22 00:00
Client ID:	BD-1	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichloroethene, Total	0.78		ug/l	0.50	0.16	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
cis-1,2-Dichloroethene	0.78		ug/l	0.50	0.19	1
Dibromomethane	ND		ug/l	5.0	0.36	1
1,4-Dichlorobutane	ND		ug/l	5.0	0.46	1
1,2,3-Trichloropropane	ND		ug/l	5.0	0.18	1
Styrene	ND		ug/l	1.0	0.36	1
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Acetone	2.5	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	0.31	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Ethyl methacrylate	ND		ug/l	5.0	0.61	1
Acrylonitrile	ND		ug/l	5.0	0.43	1
Bromochloromethane	ND		ug/l	2.5	0.15	1
Tetrahydrofuran	ND		ug/l	5.0	0.52	1
2,2-Dichloropropane	ND		ug/l	2.5	0.20	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
1,3-Dichloropropane	ND		ug/l	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.16	1
Bromobenzene	ND		ug/l	2.5	0.15	1
n-Butylbenzene	ND		ug/l	0.50	0.19	1
sec-Butylbenzene	ND		ug/l	0.50	0.18	1
tert-Butylbenzene	ND		ug/l	2.5	0.20	1
o-Chlorotoluene	ND		ug/l	2.5	0.22	1
p-Chlorotoluene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
Hexachlorobutadiene	ND		ug/l	0.50	0.22	1



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-13	Date Collected:	08/23/22 00:00
Client ID:	BD-1	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Isopropylbenzene	ND		ug/l	0.50	0.19	1
p-Isopropyltoluene	ND		ug/l	0.50	0.19	1
Naphthalene	ND		ug/l	2.5	0.22	1
n-Propylbenzene	ND		ug/l	0.50	0.17	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.21	1
Ethyl ether	ND		ug/l	2.5	0.16	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	105		70-130

Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID: L2246727-14
 Client ID: EB-1
 Sample Location: ST. CHARLES, MISSOURI

Date Collected: 08/25/22 00:00
 Date Received: 08/29/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 09/01/22 22:49
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	0.68	1
1,1-Dichloroethane	ND		ug/l	0.75	0.21	1
Chloroform	0.31	J	ug/l	0.75	0.22	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.8	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.14	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	0.50	0.18	1
Trichlorofluoromethane	ND		ug/l	2.5	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.24	1
Bromoform	ND		ug/l	2.0	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
Chloromethane	ND		ug/l	2.5	0.20	1
Bromomethane	ND		ug/l	1.0	0.26	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	1.0	0.13	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.16	1



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-14	Date Collected:	08/25/22 00:00
Client ID:	EB-1	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichloroethene, Total	ND		ug/l	0.50	0.16	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.19	1
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Dibromomethane	ND		ug/l	5.0	0.36	1
1,4-Dichlorobutane	ND		ug/l	5.0	0.46	1
1,2,3-Trichloropropane	ND		ug/l	5.0	0.18	1
Styrene	ND		ug/l	1.0	0.36	1
Dichlorodifluoromethane	ND		ug/l	5.0	0.24	1
Acetone	2.7	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	0.31	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
2-Hexanone	ND		ug/l	5.0	0.52	1
Ethyl methacrylate	ND		ug/l	5.0	0.61	1
Acrylonitrile	ND		ug/l	5.0	0.43	1
Bromochloromethane	ND		ug/l	2.5	0.15	1
Tetrahydrofuran	ND		ug/l	5.0	0.52	1
2,2-Dichloropropane	ND		ug/l	2.5	0.20	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
1,3-Dichloropropane	ND		ug/l	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.16	1
Bromobenzene	ND		ug/l	2.5	0.15	1
n-Butylbenzene	ND		ug/l	0.50	0.19	1
sec-Butylbenzene	ND		ug/l	0.50	0.18	1
tert-Butylbenzene	ND		ug/l	2.5	0.20	1
o-Chlorotoluene	ND		ug/l	2.5	0.22	1
p-Chlorotoluene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.35	1
Hexachlorobutadiene	ND		ug/l	0.50	0.22	1



Project Name: ELM POINT WELLFIELD

Lab Number: L2246727

Project Number: 21-011-03

Report Date: 09/12/22

SAMPLE RESULTS

Lab ID:	L2246727-14	Date Collected:	08/25/22 00:00
Client ID:	EB-1	Date Received:	08/29/22
Sample Location:	ST. CHARLES, MISSOURI	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Isopropylbenzene	ND		ug/l	0.50	0.19	1
p-Isopropyltoluene	ND		ug/l	0.50	0.19	1
Naphthalene	ND		ug/l	2.5	0.22	1
n-Propylbenzene	ND		ug/l	0.50	0.17	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.21	1
Ethyl ether	ND		ug/l	2.5	0.16	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	107		70-130

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/01/22 18:33
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s):	01-03,05-14		Batch:	WG1682846-5	
Methylene chloride	ND	ug/l	3.0	0.68	
1,1-Dichloroethane	ND	ug/l	0.75	0.21	
Chloroform	ND	ug/l	0.75	0.22	
Carbon tetrachloride	ND	ug/l	0.50	0.13	
1,2-Dichloropropane	ND	ug/l	1.8	0.14	
Dibromochloromethane	ND	ug/l	0.50	0.15	
1,1,2-Trichloroethane	ND	ug/l	0.75	0.14	
2-Chloroethylvinyl ether	ND	ug/l	10	0.40	
Tetrachloroethene	ND	ug/l	0.50	0.18	
Chlorobenzene	ND	ug/l	0.50	0.18	
Trichlorofluoromethane	ND	ug/l	2.5	0.16	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	
1,1,1-Trichloroethane	ND	ug/l	0.50	0.16	
Bromodichloromethane	ND	ug/l	0.50	0.19	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	
1,3-Dichloropropene, Total	ND	ug/l	0.50	0.14	
1,1-Dichloropropene	ND	ug/l	2.5	0.24	
Bromoform	ND	ug/l	2.0	0.25	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	
Benzene	ND	ug/l	0.50	0.16	
Toluene	ND	ug/l	0.75	0.20	
Ethylbenzene	ND	ug/l	0.50	0.17	
Chloromethane	ND	ug/l	2.5	0.20	
Bromomethane	ND	ug/l	1.0	0.26	
Vinyl chloride	ND	ug/l	1.0	0.07	
Chloroethane	ND	ug/l	1.0	0.13	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	
trans-1,2-Dichloroethene	ND	ug/l	0.75	0.16	

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/01/22 18:33
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s):	01-03,05-14			Batch:	WG1682846-5
1,2-Dichloroethene, Total	ND	ug/l	0.50	0.16	
Trichloroethene	ND	ug/l	0.50	0.18	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.18	
1,3-Dichlorobenzene	ND	ug/l	2.5	0.19	
1,4-Dichlorobenzene	ND	ug/l	2.5	0.19	
Methyl tert butyl ether	ND	ug/l	1.0	0.17	
p/m-Xylene	ND	ug/l	1.0	0.33	
o-Xylene	ND	ug/l	1.0	0.39	
Xylenes, Total	ND	ug/l	1.0	0.33	
cis-1,2-Dichloroethene	ND	ug/l	0.50	0.19	
Dibromomethane	ND	ug/l	5.0	0.36	
1,4-Dichlorobutane	ND	ug/l	5.0	0.46	
Iodomethane	ND	ug/l	5.0	0.40	
1,2,3-Trichloropropane	ND	ug/l	5.0	0.18	
Styrene	ND	ug/l	1.0	0.36	
Dichlorodifluoromethane	ND	ug/l	5.0	0.24	
Acetone	ND	ug/l	5.0	1.5	
Carbon disulfide	ND	ug/l	5.0	0.30	
2-Butanone	ND	ug/l	5.0	1.9	
Vinyl acetate	ND	ug/l	5.0	0.31	
4-Methyl-2-pentanone	ND	ug/l	5.0	0.42	
2-Hexanone	ND	ug/l	5.0	0.52	
Ethyl methacrylate	ND	ug/l	5.0	0.61	
Acrolein	ND	ug/l	5.0	0.44	
Acrylonitrile	ND	ug/l	5.0	0.43	
Bromochloromethane	ND	ug/l	2.5	0.15	
Tetrahydrofuran	ND	ug/l	5.0	0.52	
2,2-Dichloropropane	ND	ug/l	2.5	0.20	
1,2-Dibromoethane	ND	ug/l	2.0	0.19	

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/01/22 18:33
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s):	01-03,05-14		Batch:	WG1682846-5	
1,3-Dichloropropane	ND	ug/l	2.5	0.21	
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50	0.16	
Bromobenzene	ND	ug/l	2.5	0.15	
n-Butylbenzene	ND	ug/l	0.50	0.19	
sec-Butylbenzene	ND	ug/l	0.50	0.18	
tert-Butylbenzene	ND	ug/l	2.5	0.20	
o-Chlorotoluene	ND	ug/l	2.5	0.22	
p-Chlorotoluene	ND	ug/l	2.5	0.18	
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.35	
Hexachlorobutadiene	ND	ug/l	0.50	0.22	
Isopropylbenzene	ND	ug/l	0.50	0.19	
p-Isopropyltoluene	ND	ug/l	0.50	0.19	
Naphthalene	ND	ug/l	2.5	0.22	
n-Propylbenzene	ND	ug/l	0.50	0.17	
1,2,3-Trichlorobenzene	ND	ug/l	2.5	0.23	
1,2,4-Trichlorobenzene	ND	ug/l	2.5	0.22	
1,3,5-Trimethylbenzene	ND	ug/l	2.5	0.22	
1,3,5-Trichlorobenzene	ND	ug/l	2.0	0.14	
1,2,4-Trimethylbenzene	ND	ug/l	2.5	0.19	
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5	0.21	
Halothane	ND	ug/l	2.5	0.29	
Ethyl ether	ND	ug/l	2.5	0.16	
Methyl Acetate	ND	ug/l	10	0.23	
Ethyl Acetate	ND	ug/l	10	0.72	
Isopropyl Ether	ND	ug/l	2.0	0.42	
Cyclohexane	ND	ug/l	10	0.27	
Tert-Butyl Alcohol	ND	ug/l	10	1.4	
Ethyl-Tert-Butyl-Ether	ND	ug/l	2.0	0.18	
Tertiary-Amyl Methyl Ether	ND	ug/l	2.0	0.28	

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/01/22 18:33
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s):	01-03,05-14			Batch:	WG1682846-5
1,4-Dioxane	ND		ug/l	250	61.
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	10	0.15
Methyl cyclohexane	ND		ug/l	10	0.40
p-Diethylbenzene	ND		ug/l	2.0	0.39
4-Ethyltoluene	ND		ug/l	2.0	0.34
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54

Surrogate	%Recovery	Acceptance Criteria	
		Qualifier	Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	107		70-130

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/02/22 09:51
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s):	04		Batch:	WG1683961-5	
Methylene chloride	ND	ug/l	3.0	0.68	
1,1-Dichloroethane	ND	ug/l	0.75	0.21	
Chloroform	ND	ug/l	0.75	0.22	
Carbon tetrachloride	ND	ug/l	0.50	0.13	
1,2-Dichloropropane	ND	ug/l	1.8	0.14	
Dibromochloromethane	ND	ug/l	0.50	0.15	
1,1,2-Trichloroethane	ND	ug/l	0.75	0.14	
Tetrachloroethene	ND	ug/l	0.50	0.18	
Chlorobenzene	ND	ug/l	0.50	0.18	
Trichlorofluoromethane	ND	ug/l	2.5	0.16	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	
1,1,1-Trichloroethane	ND	ug/l	0.50	0.16	
Bromodichloromethane	ND	ug/l	0.50	0.19	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	
1,3-Dichloropropene, Total	ND	ug/l	0.50	0.14	
1,1-Dichloropropene	ND	ug/l	2.5	0.24	
Bromoform	ND	ug/l	2.0	0.25	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	
Benzene	ND	ug/l	0.50	0.16	
Toluene	ND	ug/l	0.75	0.20	
Ethylbenzene	ND	ug/l	0.50	0.17	
Chloromethane	ND	ug/l	2.5	0.20	
Bromomethane	ND	ug/l	1.0	0.26	
Vinyl chloride	ND	ug/l	1.0	0.07	
Chloroethane	ND	ug/l	1.0	0.13	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	
trans-1,2-Dichloroethene	ND	ug/l	0.75	0.16	
1,2-Dichloroethene, Total	ND	ug/l	0.50	0.16	

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/02/22 09:51
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04			Batch:	WG1683961-5	
Trichloroethene	ND	ug/l	0.50	0.18	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.18	
1,3-Dichlorobenzene	ND	ug/l	2.5	0.19	
1,4-Dichlorobenzene	ND	ug/l	2.5	0.19	
Methyl tert butyl ether	ND	ug/l	1.0	0.17	
p/m-Xylene	ND	ug/l	1.0	0.33	
o-Xylene	ND	ug/l	1.0	0.39	
Xylenes, Total	ND	ug/l	1.0	0.33	
cis-1,2-Dichloroethene	ND	ug/l	0.50	0.19	
Dibromomethane	ND	ug/l	5.0	0.36	
1,4-Dichlorobutane	ND	ug/l	5.0	0.46	
1,2,3-Trichloropropane	ND	ug/l	5.0	0.18	
Styrene	ND	ug/l	1.0	0.36	
Dichlorodifluoromethane	ND	ug/l	5.0	0.24	
Acetone	ND	ug/l	5.0	1.5	
Carbon disulfide	ND	ug/l	5.0	0.30	
2-Butanone	ND	ug/l	5.0	1.9	
Vinyl acetate	ND	ug/l	5.0	0.31	
4-Methyl-2-pentanone	ND	ug/l	5.0	0.42	
2-Hexanone	ND	ug/l	5.0	0.52	
Ethyl methacrylate	ND	ug/l	5.0	0.61	
Acrylonitrile	ND	ug/l	5.0	0.43	
Bromochloromethane	ND	ug/l	2.5	0.15	
Tetrahydrofuran	ND	ug/l	5.0	0.52	
2,2-Dichloropropane	ND	ug/l	2.5	0.20	
1,2-Dibromoethane	ND	ug/l	2.0	0.19	
1,3-Dichloropropane	ND	ug/l	2.5	0.21	
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50	0.16	
Bromobenzene	ND	ug/l	2.5	0.15	

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/02/22 09:51
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s):	04		Batch:	WG1683961-5	
n-Butylbenzene	ND	ug/l	0.50	0.19	
sec-Butylbenzene	ND	ug/l	0.50	0.18	
tert-Butylbenzene	ND	ug/l	2.5	0.20	
o-Chlorotoluene	ND	ug/l	2.5	0.22	
p-Chlorotoluene	ND	ug/l	2.5	0.18	
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.35	
Hexachlorobutadiene	ND	ug/l	0.50	0.22	
Isopropylbenzene	ND	ug/l	0.50	0.19	
p-Isopropyltoluene	ND	ug/l	0.50	0.19	
Naphthalene	ND	ug/l	2.5	0.22	
n-Propylbenzene	ND	ug/l	0.50	0.17	
1,2,3-Trichlorobenzene	ND	ug/l	2.5	0.23	
1,2,4-Trichlorobenzene	ND	ug/l	2.5	0.22	
1,3,5-Trimethylbenzene	ND	ug/l	2.5	0.22	
1,3,5-Trichlorobenzene	ND	ug/l	2.0	0.14	
1,2,4-Trimethylbenzene	ND	ug/l	2.5	0.19	
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5	0.21	
Halothane	ND	ug/l	2.5	0.29	
Ethyl ether	ND	ug/l	2.5	0.16	
Methyl Acetate	ND	ug/l	10	0.23	
Ethyl Acetate	ND	ug/l	10	0.72	
Isopropyl Ether	ND	ug/l	2.0	0.42	
Cyclohexane	ND	ug/l	10	0.27	
Tert-Butyl Alcohol	ND	ug/l	10	1.4	
Ethyl-Tert-Butyl-Ether	ND	ug/l	2.0	0.18	
Tertiary-Amyl Methyl Ether	ND	ug/l	2.0	0.28	
1,4-Dioxane	ND	ug/l	250	61.	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/l	10	0.15	
Methyl cyclohexane	ND	ug/l	10	0.40	

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/02/22 09:51
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s):	04		Batch:	WG1683961-5	
p-Diethylbenzene	ND		ug/l	2.0	0.39
4-Ethyltoluene	ND		ug/l	2.0	0.34
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54

Surrogate	%Recovery	Acceptance Criteria	
		Qualifier	Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	104		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,05-14 Batch: WG1682846-3 WG1682846-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	100		100		63-132	0		20
1,2-Dichloropropane	100		99		70-130	1		20
Dibromochloromethane	93		95		63-130	2		20
1,1,2-Trichloroethane	95		96		70-130	1		20
2-Chloroethylvinyl ether	92		95		70-130	3		20
Tetrachloroethene	100		98		70-130	2		20
Chlorobenzene	99		98		75-130	1		25
Trichlorofluoromethane	100		100		62-150	0		20
1,2-Dichloroethane	97		98		70-130	1		20
1,1,1-Trichloroethane	98		98		67-130	0		20
Bromodichloromethane	98		99		67-130	1		20
trans-1,3-Dichloropropene	89		92		70-130	3		20
cis-1,3-Dichloropropene	94		95		70-130	1		20
1,1-Dichloropropene	100		100		70-130	0		20
Bromoform	92		95		54-136	3		20
1,1,2,2-Tetrachloroethane	90		92		67-130	2		20
Benzene	100		100		70-130	0		25
Toluene	100		100		70-130	0		25
Ethylbenzene	100		100		70-130	0		20
Chloromethane	110		100		64-130	10		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,05-14 Batch: WG1682846-3 WG1682846-4								
Bromomethane	78		77		39-139	1		20
Vinyl chloride	110		110		55-140	0		20
Chloroethane	110		110		55-138	0		20
1,1-Dichloroethene	100		100		61-145	0		25
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	100		100		70-130	0		25
1,2-Dichlorobenzene	95		95		70-130	0		20
1,3-Dichlorobenzene	100		98		70-130	2		20
1,4-Dichlorobenzene	98		96		70-130	2		20
Methyl tert butyl ether	84		84		63-130	0		20
p/m-Xylene	105		100		70-130	5		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	100		94		70-130	6		20
Dibromomethane	95		98		70-130	3		20
1,4-Dichlorobutane	93		96		70-130	3		20
Iodomethane	64	Q	64	Q	70-130	0		20
1,2,3-Trichloropropane	92		96		64-130	4		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	98		98		36-147	0		20
Acetone	120		120		58-148	0		20
Carbon disulfide	110		100		51-130	10		20
2-Butanone	110		100		63-138	10		20
Vinyl acetate	82		82		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,05-14 Batch: WG1682846-3 WG1682846-4								
4-Methyl-2-pentanone	86		91		59-130	6		20
2-Hexanone	88		93		57-130	6		20
Ethyl methacrylate	86		92		70-130	7		20
Acrolein	100		110		70-130	10		20
Acrylonitrile	96		99		70-130	3		20
Bromochloromethane	98		96		70-130	2		20
Tetrahydrofuran	81		89		58-130	9		20
2,2-Dichloropropane	84		82		63-133	2		20
1,2-Dibromoethane	94		96		70-130	2		20
1,3-Dichloropropane	97		97		70-130	0		20
1,1,1,2-Tetrachloroethane	97		94		64-130	3		20
Bromobenzene	97		95		70-130	2		20
n-Butylbenzene	100		100		53-136	0		20
sec-Butylbenzene	100		100		70-130	0		20
tert-Butylbenzene	100		99		70-130	1		20
o-Chlorotoluene	100		100		70-130	0		20
p-Chlorotoluene	100		99		70-130	1		20
1,2-Dibromo-3-chloropropane	92		100		41-144	8		20
Hexachlorobutadiene	92		89		63-130	3		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	100		99		70-130	1		20
Naphthalene	89		91		70-130	2		20
n-Propylbenzene	110		100		69-130	10		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,05-14 Batch: WG1682846-3 WG1682846-4								
1,2,3-Trichlorobenzene	91		91		70-130	0		20
1,2,4-Trichlorobenzene	91		91		70-130	0		20
1,3,5-Trimethylbenzene	98		96		64-130	2		20
1,3,5-Trichlorobenzene	88		90		70-130	2		20
1,2,4-Trimethylbenzene	97		96		70-130	1		20
trans-1,4-Dichloro-2-butene	89		94		70-130	5		20
Halothane	100		97		70-130	3		20
Ethyl ether	91		97		59-134	6		20
Methyl Acetate	100		97		70-130	3		20
Ethyl Acetate	77		84		70-130	9		20
Isopropyl Ether	98		99		70-130	1		20
Cyclohexane	100		100		70-130	0		20
Tert-Butyl Alcohol	74		94		70-130	24	Q	20
Ethyl-Tert-Butyl-Ether	87		90		70-130	3		20
Tertiary-Amyl Methyl Ether	80		83		66-130	4		20
1,4-Dioxane	108		118		56-162	9		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	100		100		70-130	0		20
Methyl cyclohexane	100		97		70-130	3		20
p-Diethylbenzene	96		95		70-130	1		20
4-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	80		81		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,05-14 Batch: WG1682846-3 WG1682846-4								
Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria			
1,2-Dichloroethane-d4	98		100		70-130			
Toluene-d8	101		100		70-130			
4-Bromofluorobenzene	99		100		70-130			
Dibromofluoromethane	98		100		70-130			

Lab Control Sample Analysis

Batch Quality Control

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1683961-3 WG1683961-4								
Methylene chloride	97		97		70-130	0		20
1,1-Dichloroethane	99		99		70-130	0		20
Chloroform	96		96		70-130	0		20
Carbon tetrachloride	94		93		63-132	1		20
1,2-Dichloropropane	97		96		70-130	1		20
Dibromochloromethane	94		94		63-130	0		20
1,1,2-Trichloroethane	95		98		70-130	3		20
Tetrachloroethene	98		97		70-130	1		20
Chlorobenzene	98		98		75-130	0		25
Trichlorofluoromethane	120		120		62-150	0		20
1,2-Dichloroethane	92		95		70-130	3		20
1,1,1-Trichloroethane	96		96		67-130	0		20
Bromodichloromethane	94		93		67-130	1		20
trans-1,3-Dichloropropene	90		93		70-130	3		20
cis-1,3-Dichloropropene	91		92		70-130	1		20
1,1-Dichloropropene	96		93		70-130	3		20
Bromoform	79		83		54-136	5		20
1,1,2,2-Tetrachloroethane	85		91		67-130	7		20
Benzene	99		98		70-130	1		25
Toluene	99		96		70-130	3		25
Ethylbenzene	97		94		70-130	3		20
Chloromethane	87		86		64-130	1		20
Bromomethane	110		110		39-139	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1683961-3 WG1683961-4								
Vinyl chloride	110		100		55-140	10		20
Chloroethane	140	Q	140	Q	55-138	0		20
1,1-Dichloroethene	100		100		61-145	0		25
trans-1,2-Dichloroethene	99		97		70-130	2		20
Trichloroethene	92		92		70-130	0		25
1,2-Dichlorobenzene	95		94		70-130	1		20
1,3-Dichlorobenzene	96		95		70-130	1		20
1,4-Dichlorobenzene	94		96		70-130	2		20
Methyl tert butyl ether	81		85		63-130	5		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	95		90		70-130	5		20
cis-1,2-Dichloroethene	97		99		70-130	2		20
Dibromomethane	94		93		70-130	1		20
1,4-Dichlorobutane	83		88		70-130	6		20
1,2,3-Trichloropropane	83		88		64-130	6		20
Styrene	100		95		70-130	5		20
Dichlorodifluoromethane	95		95		36-147	0		20
Acetone	80		80		58-148	0		20
Carbon disulfide	100		97		51-130	3		20
2-Butanone	69		84		63-138	20		20
Vinyl acetate	74		78		70-130	5		20
4-Methyl-2-pentanone	82		77		59-130	6		20
2-Hexanone	68		72		57-130	6		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1683961-3 WG1683961-4								
Ethyl methacrylate	81		80		70-130	1		20
Acrylonitrile	84		94		70-130	11		20
Bromochloromethane	100		100		70-130	0		20
Tetrahydrofuran	92		92		58-130	0		20
2,2-Dichloropropane	86		85		63-133	1		20
1,2-Dibromoethane	94		97		70-130	3		20
1,3-Dichloropropane	98		97		70-130	1		20
1,1,1,2-Tetrachloroethane	95		94		64-130	1		20
Bromobenzene	94		95		70-130	1		20
n-Butylbenzene	98		98		53-136	0		20
sec-Butylbenzene	100		97		70-130	3		20
tert-Butylbenzene	96		93		70-130	3		20
o-Chlorotoluene	96		95		70-130	1		20
p-Chlorotoluene	93		90		70-130	3		20
1,2-Dibromo-3-chloropropane	75		84		41-144	11		20
Hexachlorobutadiene	96		96		63-130	0		20
Isopropylbenzene	96		94		70-130	2		20
p-Isopropyltoluene	97		94		70-130	3		20
Naphthalene	80		90		70-130	12		20
n-Propylbenzene	98		96		69-130	2		20
1,2,3-Trichlorobenzene	88		93		70-130	6		20
1,2,4-Trichlorobenzene	92		95		70-130	3		20
1,3,5-Trimethylbenzene	93		92		64-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1683961-3 WG1683961-4								
1,3,5-Trichlorobenzene	96		96		70-130	0		20
1,2,4-Trimethylbenzene	94		93		70-130	1		20
trans-1,4-Dichloro-2-butene	76		82		70-130	8		20
Halothane	100		98		70-130	2		20
Ethyl ether	130		140	Q	59-134	7		20
Methyl Acetate	80		81		70-130	1		20
Ethyl Acetate	76		86		70-130	12		20
Isopropyl Ether	87		88		70-130	1		20
Cyclohexane	96		94		70-130	2		20
Tert-Butyl Alcohol	74		86		70-130	15		20
Ethyl-Tert-Butyl-Ether	82		84		70-130	2		20
Tertiary-Amyl Methyl Ether	77		80		66-130	4		20
1,4-Dioxane	124		134		56-162	8		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	98		98		70-130	0		20
Methyl cyclohexane	96		94		70-130	2		20
p-Diethylbenzene	94		92		70-130	2		20
4-Ethyltoluene	96		94		70-130	2		20
1,2,4,5-Tetramethylbenzene	89		90		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Parameter	<i>LCS</i>		<i>LCSD</i>		<i>%Recovery</i>		<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
	<i>%Recovery</i>	<i>Qual</i>	<i>%Recovery</i>	<i>Qual</i>	<i>Limits</i>				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1683961-3 WG1683961-4									
<i>Surrogate</i>			<i>LCS</i>		<i>LCSD</i>				<i>Acceptance</i> <i>Criteria</i>
1,2-Dichloroethane-d4			100		101				70-130
Toluene-d8			107		104				70-130
4-Bromofluorobenzene			94		94				70-130
Dibromofluoromethane			104		104				70-130

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Serial_No:09122219:46
Lab Number: L2246727
Report Date: 09/12/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2246727-01A	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-01B	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-01C	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-02A	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-02B	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-02C	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-03A	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-03B	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-03C	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-04A	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-04B	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-04C	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-05A	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-05B	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-05C	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-06A	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-06B	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-06C	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-07A	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-07B	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-07C	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-08A	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-08B	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2246727-08C	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-09A	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-09B	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-09C	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-10A	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-10B	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-10C	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-11A	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-11B	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-11C	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-12A	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-12B	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-12C	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-13A	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-13B	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-13C	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-14A	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-14B	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)
L2246727-14C	Vial HCl preserved	A	NA		5.4	Y	Absent		8260(14)

*Values in parentheses indicate holding time in days

Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

Data Qualifiers

Identified Compounds (TICs).

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



Project Name: ELM POINT WELLFIELD
Project Number: 21-011-03

Lab Number: L2246727
Report Date: 09/12/22

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpineol

EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine. SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C**, **SM4500CN-CE**, **EPA 180.1**, **SM2130B**, **SM4500CI-D**, **SM2320B**, **SM2540C**, **SM4500H-B**, **SM4500NO2-B**

EPA 332: Perchlorate; **EPA 524.2**: THMs and VOCs; **EPA 504.1**: EDB, DBCP.

Microbiology: **SM9215B**; **SM9223-P/A**, **SM9223B-Colilert-QT**, **SM9222D**.

Non-Potable Water

SM4500H,B, **EPA 120.1**, **SM2510B**, **SM2540C**, **SM2320B**, **SM4500CL-E**, **SM4500F-BC**, **SM4500NH3-BH**: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, **EPA 351.1**, **SM4500NO3-F**, **EPA 353.2**: Nitrate-N, **SM4500P-E**, **SM4500P-B**, **E**, **SM4500SO4-E**, **SM5220D**, **EPA 410.4**, **SM5210B**, **SM5310C**, **SM4500CL-D**, **EPA 1664**, **EPA 420.1**, **SM4500-CN-CE**, **SM2540D**, **EPA 300**: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.

Microbiology: **SM9223B-Colilert-QT**; **Enterolert-QT**, **SM9221E**, **EPA 1600**, **EPA 1603**, **SM9222D**.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8**: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg. **EPA 522**, **EPA 537.1**.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



CHAIN OF CUSTODY

PAGE 1 OF 2

WESTBORO, MA
TEL: 508-898-9220
FAX: 508-898-9193

MANSFIELD, MA
TEL: 508-822-9300
FAX: 508-822-3288

Client Information

Client: 212 Environmental Consulting
Address: 2021 Auburn Avenue
Cincinnati, OH 45219
Phone: 419-309-0603

Fax:

Email: tadd.asehyne@212environmental.com

 These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

- All samples collected in central time zone
- Per agreement do not charge 7.5% service fee - B. Dressman
- There are two sample batches in this order - Run separately

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	ANALYSIS 8260	SAMPLE HANDLING		TOTAL # BOTTLES
		Date	Time				Filtration	Done	
46727-01	CW-4, 08232022	8/23/22	15:50	GW	NM	✓			3
02	CW-5, 08232022	8/23/22	12:40	GW	NM	✓			3
-03	CW-6, 08232022	8/23/22	17:50	GW	NM	✓			3
-04	CW-7, 08242022	8/24/22	14:25	GW	NM	✓			3
-05	CW-8, 08242022	8/24/22	11:15	GW	NM	✓			3
-06	CW-9, 08242022	8/24/22	16:30	GW	NM	✓			3
-07	CW-10, 08242022	8/24/22	12:40	GW	NM	✓			3
-08	CPZ-1, 08252022	8/25/22	16:20	GW	NM	✓			3
-09	CPZ-2, 08252022	8/25/22	13:50	GW	NM	✓			3
-10	CPZ-3, 08252022	8/25/22	11:15	GW	NM	✓			3

Container Type A

Preservative B

Relinquished By:

Date/Time

Received By:

Date/Time

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By: <i>Tadd Asehyne</i>	Date/Time: 8/24/22 10:00	Received By: <i>Stephanie</i>	Date/Time: 8/27/22 10:00 AM
Relinquished By: <i>Paula Ondra</i>	Date/Time: 8/27/22 11:00 AM	Received By: <i>Paula Ondra</i>	Date/Time: 8/29/22 12:00 PM
Relinquished By: <i>CD</i>	Date/Time: 8/27/22 10:00	Received By: <i>CD</i>	Date/Time: 8/27/22 09:00



CHAIN OF CUSTODY

PAGE 2 OF 2

WESTBORO, MA MANSFIELD, MA
TEL: 508-898-9220 TEL: 508-822-9300
FAX: 508-898-9193 FAX: 508-822-3288

Client Information

Client: 212 Environmental Consulting

Address: 2021 Auburn Avenue
Cincinnati, OH 45219

Phone: 419-309-0603

Fax:

Email: tell.aesthyne@212environmental.com

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

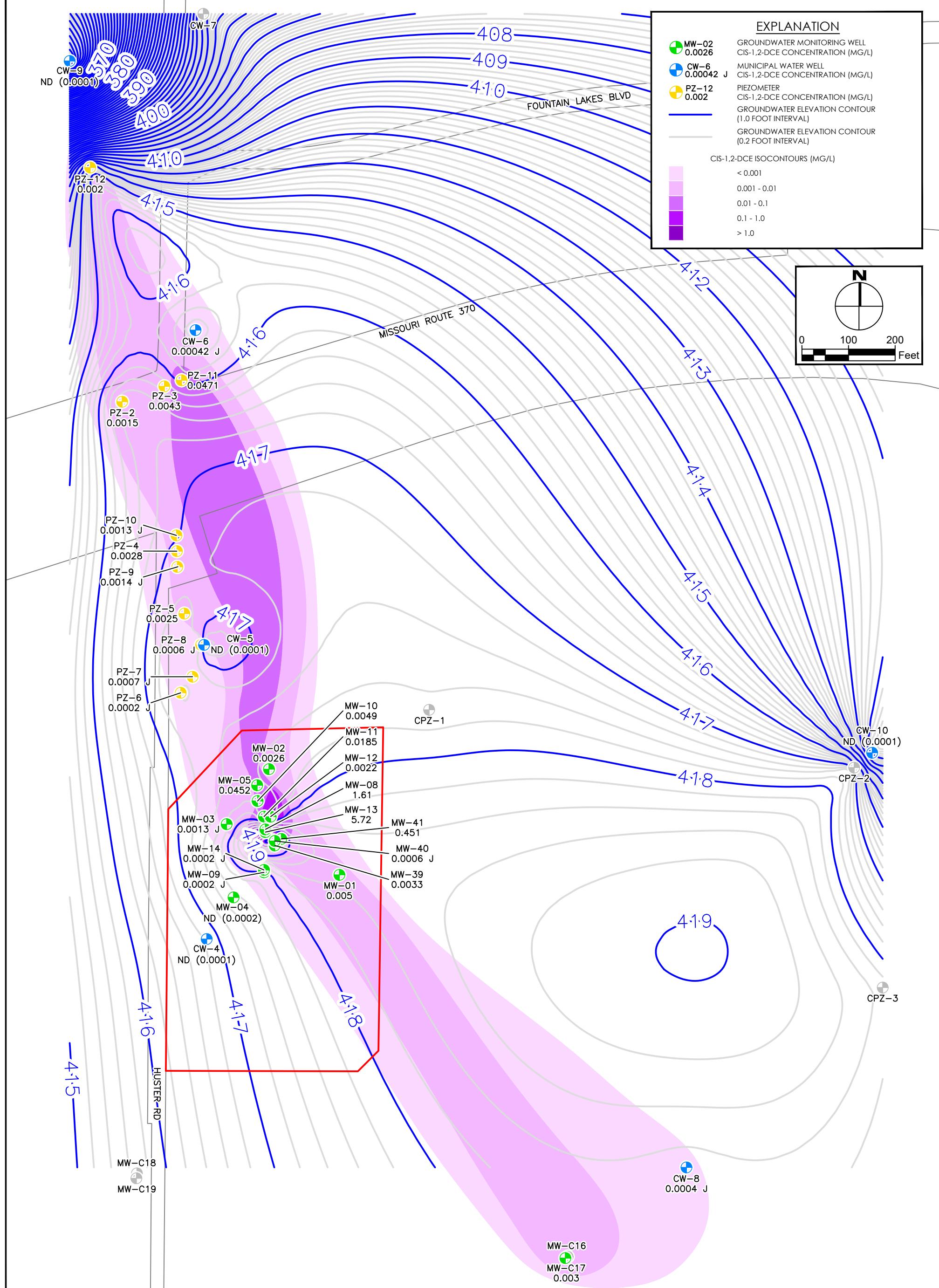
- All samples collected in central time zone
- Per agreement do not charge 7.5% service fee - B. Dressman
- There are two sample batches in this order - Run Separately

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		

46727-11	EFFLUENT, 08232022	8/23/22	13:30	GW	NM	✓	3
-12	INFLUENT, 08232022	8/23/22	14:15	GW	NM	✓	3
-13	BD-1	8/23/22	-	GW	NM	✓	3
-14	EB-1	8/23/22	-	GW	NM	✓	3

Project Information		Date Rec'd in Lab: <u>8/30/22</u>	ALPHA Job #: <u>L2246727</u>	
Project Name: <u>Elm Point Wellfield</u> Project Location: <u>St. Charles, Missouri</u> Project #: <u>21-011-03</u> Project Manager: <u>T. Aesthyne</u> ALPHA Quote #:		Report Information - Data Deliverables		Billing Information
<input type="checkbox"/> FAX <input checked="" type="checkbox"/> PDAEx		<input type="checkbox"/> EMAIL <input type="checkbox"/> Add'l Deliverables		<input type="checkbox"/> Same as Client Info PO #:
Regulatory Requirements/Report Limits				
State / Fed Program		Criteria		
ANALYSIS <u>8260</u>				
SAMPLE HANDLING Filtration _____ <input type="checkbox"/> Done <input type="checkbox"/> Not needed <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please specify below) Sample Specific Comments				
TOTAL # BOTTLES				
<u>Not Used</u>				
Container Type <u>A</u> Preservative <u>B</u>				
Relinquished By: <u>Tell Aesthyne</u> <u>8/29/22 10:00 AM</u> <u>John E. Strohmer 8/29/22 12:00 PM</u> <u>John E. Strohmer 8/29/22 9:20 AM</u>		Received By: <u>John E. Strohmer 8/29/22 10:00 AM</u> <u>John E. Strohmer 8/29/22 1:00 PM</u> <u>John E. Strohmer 8/29/22 12:00 PM</u>		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.
FORM NO: 01-01 (rev. 14-OCT-07)				

Figure 1



TITLE:

FIGURE 1. CIS-1,2-DICHLOROETHENE PLUME
MAY 20221" = 200'
SCALE.21-011-03
PROJECT NO.09/26/22
DATE.

SITE:

CITY OF ST. CHARLES POTABLE WELL FIELD
ST. CHARLES, MISSOURINTM
DRAWN.TAA
CHECKED.REV. 1
REVISION.2021 Auburn Avenue
Third Floor Suites
Cincinnati, Ohio 45219